



Rights-based fisheries governance: from fishing rights to human rights

Edward H Allison¹, Blake D Ratner², Björn Åsgård³, Rolf Willmann⁴, Robert Pomeroy¹ & John Kurien⁵

¹The WorldFish Center, PO Box 500 GPO, 10670 Penang, Malaysia; ²The WorldFish Center, PO Box 1135, Phnom Penh, Cambodia; ³Swedish Board of Fisheries, PO Box 423, 401 26 Gothenburg, Sweden; ⁴Food and Agriculture Organization of the United Nations, Viale delle Terme di Caracalla, 00153 Rome, Italy; ⁵Centre for Development Studies, Trivandrum 695 011, India

Abstract

In the last twenty years, policy prescriptions for addressing the global crisis in fisheries have centred on strengthening fisheries governance through clarifying exclusive individual or community rights of access to fishery resources. With a focus on small-scale developing-country fisheries in particular, we argue that basing the case for fishery governance reform on assumed economic incentives for resource stewardship is insufficient when there are other sources of insecurity in people's lives that are unrelated to the state of fishery resources. We argue that more secure, less vulnerable fishers make more effective and motivated fishery managers in the context of participatory or rights-based fisheries governance, and we further suggest that insecurity among fishers living in poverty can be most effectively addressed by social and political development that invokes the existing legal framework supporting the Universal Declaration of Human Rights. This perspective goes well beyond the widely advocated notion of 'rights-based fishing' and aligns what fishery sector analysts call the 'rights-based approach' with the same terminology used in the context of international development. Embedding the fisheries governance challenge within a broader perspective of human rights enhances the chances of achieving both human development and resource sustainability outcomes in small-scale fisheries of developing countries.

Keywords Economic development, governance, human rights, human security, property rights, small-scale fisheries

Correspondence:

Edward H. Allison,
The WorldFish Center,
PO Box 500 GPO,
10670 Penang,
Malaysia
Tel.:
+60 4 620 2120
Fax:
+60 4 626 5530
E-mail: e.allison@
cgiar.org

Received 6 Jul 2010

Accepted 6 Jan 2011

Introduction	15
Shaky assumptions: property rights, economic efficiency and livelihood security	16
Poverty, vulnerability and exclusion in the fisheries sector	18
Redefining rights-based fisheries governance to include human rights	19
Rights-based approaches and fisheries governance: an agenda for action	21
When is a human rights approach appropriate?	23
Lake Victoria	23
Philippines	23
Chile	24
Discussion	24

Conclusion	25
Acknowledgements	25
References	26

Introduction

Workers aboard commercial fishing trawlers operating illegally off the coast of West Africa operate under 'conditions akin to slavery', exposed to physical abuse, unsafe and unsanitary conditions and are prevented from returning ashore for months or even years at a time. Some 180 000 Burmese fishermen and women fish processors and labourers are estimated to be working undocumented in Thailand's billion-dollar-a-year fishing industry. In many developing countries, fishing vessels operating under 'flags of convenience' are able to avoid monitoring and work outside of the law, with crew members lured by promises of attractive pay and then essentially trapped by debt and coercion, neglecting minimum standards of crew safety, sanitation and work conditions. Such are the injustices vividly documented by the Environmental Justice Foundation (2010) in a series of videos addressing human rights abuses in the shadow world of 'pirate fishing'. The International Labour Organization (ILO 1999) has estimated that some 24 000 fatalities occur globally each year in the fishing industry because of unsafe and unhealthy conditions, though the true extent of the labour rights problems in illegal, unregulated and unreported (IUU) fishing is by nature difficult to track and quantify. In addition to the most egregious rights violations associated with commercial fishing are the less obvious, more insidious and long-term 'hidden' shortfalls in social, economic and cultural dimensions of human rights in fishing communities, manifest as poverty and social exclusion. Yet, despite the importance of a human rights perspective to understanding the challenges facing the fisheries sector in developing countries, these concerns have received strikingly little attention in debates over policy, legal and institutional reform in the sector.

In the last twenty years, policy prescriptions for addressing the global crisis in fisheries have centred on strengthening fisheries governance, principally through state and international action to combat IUU fishing (Food and Agriculture Organization of

the United Nations (FAO) 2001) and by designating or clarifying exclusive individual or community rights of access to fishery resources (Neher *et al.* 1989; Shotton 2000; Hannesson 2004; Organisation for Economic Co-operation and Development (OECD) 2006a). Many argue (e.g. World Bank 2004; Beddington *et al.* 2007; Cunningham *et al.* 2009) that these reforms will prevent the 'race for fish' or 'tragedy of the commons' that is resulting in the depletion of fish stocks, degradation of aquatic environments and reduction in the economic and nutritional contributions of fisheries, particularly in low income food deficit countries.

Arguments for the necessity and desirability of these governance reforms are built on the assumption that fisherfolk themselves, as rights holders (whether individual or communal) will have every incentive to participate in this process, as their livelihoods depend on its success. With a focus on small-scale developing-country fisheries in particular, we argue that basing the case for fishery governance reform on the assumed economic incentives for action by fishers requires a broad understanding of the factors that shape those incentives – factors that may be external to the fishery. Our argument responds to the call for an incentives-based fisheries governance reform that builds on a better understanding of fishers' economic motives for resource conservation (Grafton *et al.* 2006). Our extension to this incentives-based approach is also built on a well-established economic principle – that people tend to save more (be it money or fish) when they feel secure and spend (or catch) more when they do not (Mill 1909, chapter IX; Sandmo 1970; Browning and Lusardi 1996). We argue that more secure, less vulnerable fisherfolk have more incentive to participate in saving fish stocks and therefore make more effective and motivated fishery managers in the context of participatory or rights-based fisheries governance. We further suggest that insecurity among fisherfolk living in poverty can be most effectively addressed by making use of the existing legal framework that supports the Universal Declaration of Human Rights, as the poverty and marginalization experienced in many small-scale

fishing communities amounts to a violation of people's social, economic and cultural rights and sometimes their civic and political rights as well. This perspective goes well beyond the widely advocated notion of 'rights-based fishing' and aligns what fishery sector analysts call the 'rights-based approach' with the same terminology used by those involved in international development across both natural resources and social sectors (Gleick 1998; Farrington 2001; Cornwall and Nyamu-Musembi 2004; Office of the High Commissioner for Human Rights (OHCHR) 2004; OECD 2006b, Gruskin *et al.* 2007).

In developing this argument, we provide a theoretically grounded case that supports recent calls by fishery sector non-governmental organizations (NGOs) for governments to uphold the basic economic, social and cultural rights of small-scale fisherfolk and fishery-dependent indigenous people (Sharma 2009; FAO 2009). We argue that violations of legally defined basic human rights (e.g. rights to food, rights to decent work, children's rights) undermine the governability of fisheries and are therefore both a concern to fishery management, and an obligation of the fisheries development programmes instigated by states and their development partners.

In the discussion, we address how the human-rights-based approach to improved governance differs from both conventional prescriptions for improving fisheries management and development of fishing-dependent communities, as well as current efforts at human rights advocacy in the fisheries sector. We conclude by arguing that embedding the fisheries governance challenge within a broader perspective on human rights enhances the chances of achieving both human development and resource sustainability outcomes in small-scale fisheries of developing countries.

Shaky assumptions: property rights, economic efficiency and livelihood security

For many of its promoters, the rights-based approach to fisheries management is concerned uniquely with fishing rights, based on a search for greater economic efficiency in resource use. This approach argues that to become sustainable and profitable, the fishing industry must move towards management that allows restriction on who can have access to the fishery, how much fishing effort individual participants are allowed or how much

catch each can take. The more complete the set of property rights, the less exposed the fishers are to the actions of others, the less risk they face, the more stable are expectations concerning catch and management, and the greater the incentive for long-term sustainability and greater stewardship (Townsend and Charles 1997; Charles 2002; Edwards 2003; Hilborn 2007). Clarifying and enforcing rights to ownership and/or access to fisheries resources is therefore viewed as the chief measure required to stem fisheries decline (Townsend 1998). This entails replacing or supplementing the currently ineffective governance system, where states manage inshore coastal and inland fisheries, with one based on better defined fishing rights, devolved to individuals, firms or communities. The theoretical concept is to end the 'race for fish' that results from non-exclusionary rights systems (Christy 1996; Runolfsson 1998; Hilborn *et al.* 2005; OECD 2006a).

While many advocates speak of the need to introduce private property rights in fisheries, in practice policies focus on dedicated privileges to harvest a share of a defined total allowable catch. Typically, this takes the form of individual transferable quotas (ITQs), though group-based quotas as well as species and area-based designations of access rights (also known as territorial use rights in fisheries) are also in use. Labelling these as 'property rights' is in fact a misnomer because they relate to the catch as opposed to exclusive control of the underlying resource and because they are not permanent (Macinko and Bromley 2004; Sumaila 2010). In the 18 countries that have implemented ITQs over the past three decades, the measures have generally been deemed successful in improving economic efficiency in the sector, but the effects on fish stock biomass are inconsistent, with improvements recorded in 12 of 20 stocks and declines in 8 of 20 (Chu 2009). Economic efficiency, moreover, typically entails a consolidation of use rights in the hands of larger operators, which raises concerns of social equity and livelihoods that need to be addressed as well. Economic incentives also do not specifically protect against environmentally destructive practices such as high grading (discarding less valuable fish to maximize the value of a vessel's take; Sumaila 2010). Thus, despite the singular focus of many advocates of fishing rights reforms on economic efficiency, a broader range of policy and regulatory measures are required to attend to social and ecological goals in fisheries

management as well (Chu 2009; Gibbs 2009). In the context of small-scale developing-country fisheries, advocates of this (property) rights-based approach argue that strengthening exclusionary forms of fishing rights can provide a route out of poverty for people engaged in small-scale fishing (e.g. Cunningham *et al.* 2009). This logic assumes that fisherfolk's poverty and vulnerability are mainly related to insecure resource access and inadequate legal, policy and operational frameworks for fishery management, which lead to fishery resource degradation and result in more variable and declining fishing incomes. If this is indeed the case, strengthening people's rights of access to fishery resources and limiting them to fewer people will improve livelihood security (at least for those not excluded). It will also potentially increase fishing incomes and empower fishing people with decision-making responsibility, allowing them to take a greater measure of control over an important aspect of their lives, with a positive impact on poverty reduction (Berkes *et al.* 2001). There are two missing elements of this discussion – one related to distributive justice, and the other is related to the assumption that economic insecurity of fishers is primarily or mainly caused by weaknesses in the fishing rights regime.

Ethics and social justice issues have generally been ignored in the debate over resource access, as the concern has been to promote (economic) efficiency (Ommer 2000; Lam and Pauly 2010). With the dwindling state of global fish stocks, and the chronic hunger experienced in fishing communities throughout the world, decisions about resource access need to increasingly weigh the right of the poor to fish for food against the privilege of wealthy nations to satisfy the cravings of a lucrative high-end market (Pitcher and Lam 2010). In such a context, profit maximization and economic efficiency are no longer sufficient goals and need to be supplemented with ideas of corporate social responsibility, distributive justice and rights to food, to ensure that local communities get the benefits of fishing and fish trade (Bundy *et al.* 2008).

A number of indigenous groups have with some success used international human rights treaties to ensure better access to fisheries resources for subsistence purposes, showing that human rights have a role to play in ensuring greater equity in fisheries management between small-scale fishers and the large-scale industrial fleet (Davis and Jentoft 2001; Smith and Dodson 2010). Our argument goes

further than the debate on ethics/human rights and fishing rights, however, as we want to discuss the fundamental human rights of fisherfolk and how a failure to address these issues will influence the success of fisheries governance.

Without a doubt, resource tenure and access rights comprise an essential factor influencing livelihood security for fisherfolk, and such rights have been claimed and fought over, as the above-mentioned examples illustrate. However, insecure rights of access are not the only insecurity faced by fisherfolk, so approaches to fishery governance which only considers fishing rights when thinking about the development needs of the fishery sector may be ineffective. The extensive experience with fisheries comanagement over the last two decades provides clear evidence that investment in strengthening fishing rights often fails to deliver the expected benefits if not combined with measures to address other, sometimes more fundamental, causes of livelihood insecurity (Njock *et al.* 2009). Comanagement – a system of cooperative governance of resources in which resource management responsibility is shared between government, resource users and other stakeholders – has for the last decade been the institutional model most commonly promoted for implementing rights-based fisheries management in developing countries (Shotton 2000). In Asia, Bangladesh, Cambodia, Vietnam, Thailand, Indonesia and the Philippines, all have established comanagement policies (Pomeroy and Viswanathan 2003), while in Africa, comanagement through beach village committees or beach management units has been piloted and legislated for throughout Eastern and Southern Africa and in several West African countries (Béné *et al.* 2009; Njock *et al.* 2009).

Comanagement arrangements can be combined with community property rights, i.e. the rights to a particular fishing ground for a community rather than a number of individual actors. The implementation of rights-based fishing in a comanagement context has in some instances led to improved catches, reduced poverty and greater equity and empowerment of fishing communities (Pomeroy and Ahmed 2006). To clarify access rights, grant legal recognition to community management and exclusive use rights to communities (usually geographically defined), governments must however be prepared to devolve management responsibilities to a community level (Kurien 2007).

In cases where the success of comanagement is less evident, oft-cited reasons include failures of

internal governance and rules that are unable to accommodate technological or social and economic change (Willmann 2000) as well as lack of trust between fishing communities and fishery officials (Pomeroy *et al.* 2001). Assessments of the outcomes of comanagement projects in Africa's inland fisheries have shown that intended beneficiaries of such projects clearly lacked the incentives and capacity to participate effectively in sustaining these institutions beyond the life of the projects that created them (Geheb and Sarch 2002; Béné *et al.* 2009). Lack of trust, borne of a lack of accountability, itself borne of deficiencies in citizens' rights with respect to government, can undermine fishers' incentives to participate in comanagement. More fundamental still, however, is the common failure to appreciate the full range of factors that influence the poverty and vulnerability of small-scale fishers and therefore their incentives for action. If the decline of fish stocks and insecure rights of access to them are not the primary causes of poverty and vulnerability among fishing people, then transferring rights and responsibilities for management of fisheries to them will fail to address the reasons people are poor and their lives and livelihoods insecure.

Similar concerns apply with the development of other fishing rights regimes, such as ITQs, in the context of weak states that also lack strong civil society organizations representing the poor. ITQs, as well as being technically and administratively difficult, are liable to elite capture of catch shares in situations where fishing communities are riven by inequities of power and governance is not transparent. This can leave the intended beneficiaries of improved fishery governance, such as the poor, worse off (Ratner and Baran 2008).

Poverty, vulnerability and exclusion in the fisheries sector

Reforming fishery management processes and fishing rights can be expected to produce the greatest economic and social benefits in circumstances where there is a clearly perceived threat because of overharvesting; production systems are relatively secure from major external environmental threats; the fishery is managed by people whose lives are otherwise fairly secure; and there is a stable economy in which property rights are maintained by efficient regulatory institutions.

But how will rights-based fishing fare in an alternative set of circumstances – a situation in

which fish are over-exploited by people whose lives are highly insecure; in a context where rights to live and work adjacent to a coast or water body are absent or poorly defined; where entire production systems are threatened by upstream dams or pollution or coastal habitat destruction; and where there is an absence of the basic services that can provide for a decent and secure life, such as primary health care, education, law and order, access to justice and political representation? In these circumstances, using aquatic property rights reform as the main entry point for improving fisheries' economic performance is unlikely to be successful. Indeed, analysis of the outcomes of fishery sector development programmes has spawned a growing appreciation that the drivers of overfishing and the causes of fisherfolk's poverty, vulnerability and marginalization often lie outside the fishery sector or are not exclusive to it (Smith 1979; Béné 2003; Andrew and Evans 2009).

Recent research on poverty in fishing communities (summarized in Thorpe *et al.* 2007; Béné *et al.* 2007; Béné and Friend 2009; Béné *et al.* 2010a; Allison *et al.* 2011) concludes:

- *The income and asset-ownership status of fisherfolk is highly variable within communities.* Boat and gear owners and larger-scale traders can be among the wealthier members of their communities. Working as a crew member on a fishing boat or processing fish for sale can provide better financial returns than other wage-labour options. But incomes are often uncertain and seasonal; where fisheries resources are in decline, incomes are also declining.
- *Fisherfolk are often excluded* from access to other employment opportunities, from equitable access to land, social services such as health and education, and may have weak political representation. They may also be poorly served by roads, markets and other infrastructure. These factors lead to marginalization of fisherfolk in development processes.
- *Fishing people are vulnerable* because of marginalization, insecure rights of access to resources and dependence on uncertain production systems, as well as the risky nature of many fishing operations. They are exposed to risk; their livelihood systems are sensitive to those risks; and their marginalization makes it difficult to adapt to the impacts of 'shocks' and adverse trends in the natural environment, the economy or to policy and governance failures.

Income and asset poverty, marginalization and vulnerability are interrelated and overlapping conditions (FAO 2005; Allison *et al.* 2011). For example, the poor tend to be more vulnerable to external 'shocks' because they lack assets to absorb and recover from the impacts of events such as destructive floods. Or those that are vulnerable because their livelihoods are exposed to and sensitive to physical risks may become impoverished; fishers impacted by the 2004 Asian tsunami are an example (Pomeroy *et al.* 2006). Similarly, poor people can become impoverished because they are excluded from the rights and opportunities available to others, sometimes on grounds of ethnicity, citizenship or gender. Or the poor, lacking assets such as access to education and information become marginalized in political processes such as local development planning and are thus denied rights of participation (Sen 2000).

Because small-scale fishers account for over 90% of the world's fishers, they are central to any attempts at reforming fisheries management and governance. What we are suggesting here, in essence, is complementing the focus on the 'governance system' that is taken by much fisheries literature, with an analysis of some of the key elements of the 'system to be governed', to use the terminology of Kooiman *et al.* (2005). The interactive governance approach of these scholars is now being used to evaluate fisheries and is bringing together the interactive study of poverty and governance in fishing communities (Jentoft *et al.* 2010; Onyango and Jentoft 2010). This is part of a broad movement towards consideration of fisheries as linked social-ecological systems, which culminates in ecosystem-based and resilience-based approaches to assessment and management of fisheries social-ecological systems (Andrew *et al.* 2007; De Young *et al.* 2008).

Participatory assessment of vulnerability in African fishing communities shows that priority concerns of fisherfolk are health, food security, access to cash, lack of infrastructure and education. Worries over the state of fish stocks and access to the resource were not found to be primary for these communities (Goulden 2006; Barratt 2009; Mills *et al.* 2009). Fishing communities articulate a high degree of threat from corruption and theft, fatal epidemic diseases unchecked because of lack of access to medical facilities, uncertainties generated by climate variability and change, and threat of eviction because

of a lack of stable title to land adjacent to aquatic resources (Thorpe *et al.* 2007).

Redefining rights-based fisheries governance to include human rights

Where fisherfolk live insecure lives and do not perceive the decline or possible collapse of fish stocks as the most immediate threat to their well-being, development investments focused narrowly on aquatic resource access and tenure reform do not gain the support of fisherfolk. Simply put, vulnerable people do not make the most effective and motivated resource stewards. In such circumstances, other insecurities in the fishery social-ecological system, such as those described in the previous section, may need to be understood and acted upon first if economic inefficiencies generated by weak property rights are to be addressed successfully.

It is clear that small-scale fisherfolk are also interested in claiming and defending their rights, but that their conception of rights is broader than that of advocates of [property] rights-based fishing and aligns more closely with what development practitioners refer to as right-based approaches (International Collective in Support of Fishworkers (ICSF) 2007, 2008a,b). In the field of international economic development, a rights-based approach implies basing development strategies on peoples' claims to their basic entitlements: enough food, decent work, freedom from oppression and the right to a dignified life (Farrington 2001; Cornwall and Nyamu-Musembi 2004; OHCHR 2004; Seymour and Pincus 2008). Failures by states, donor agencies and global civil society to attempt to provide all the world's citizens with these basic entitlements can legitimately be regarded as violations of international human rights law (Pogge 2006). Thus, citizens whose basic rights are unmet (within the constraints of the state's ability to provide them) are legally entitled to hold 'duty-bearers' to account. These duty-bearers include fisheries management agencies but also other authorities such as law-makers, the police and other government agencies. Rights-based development thus aims to use the framework of international human rights law and its codification in national legal systems as a basis for securing the rights of groups of citizens who the state – or its partners in the development industry – is currently neglecting or harming (cf. Cornwall and Nyamu-Musembi 2004).

We believe that a rights-based approach has promise in creating greater equity in resource access. As noted earlier, indigenous communities in, for example, the Philippines, Canada and New Zealand, have used human rights arguments to secure fishing rights as part of a wider quest for self-determination and equal rights as citizens (Davis and Jentoft 2001; Sherman 2006; Capistrano 2010). In Cambodia, a major policy reform introduced in 2000–2001 saw over half of the area of inland commercial fishing grounds turned over to local community access. The reforms were spurred in large part by popular organizing and advocacy in protest of specific human rights violations (violent acts on behalf of the concessionaires of commercial fishing lots) and more general claims of injustice as an increasing population of fishers faced declining catches and vulnerable livelihoods (Ratner 2006). In South Africa, small-scale fishers have staked a successful claim against the Ministry of Environmental Affairs, arguing that the fishing quota allocation process had violated their basic rights. A court order was granted that interim fishing permits be issued to small-scale fishermen that had been left out in the initial allocation process, and the government is now proposing a small-scale fisheries policy grounded in human rights principles (Legal Resources Centre 2007; Department of Agriculture, Forestry and Fisheries 2010; *Minister of Environmental Affairs and Tourism v George and others* [2006] ZASCA 57; *West Coast Rock Lobster Association and Others v Minister of Environmental Affairs and Tourism and Others* [2008] ZAWCHC 123).

The current trend towards devolving fishing rights to resource users will have greater benefits if there is a simultaneous effort to reduce vulnerability and social exclusion both within small-scale fishing communities and between them and wider society and the economy (Charles 2011). Addressing security issues such as livelihood, food, and peace and order are fundamental. Many people in fishing communities lack the power, education and cohesive social institutions to be aware of their rights, able to self-organize and to articulate their demands, negotiate with government officials and to carry out their responsibilities as resource stewards (Isaacs 2006). Empowered citizens are also better able to articulate and demand equity and resist processes like elite capture of benefits from communally managed fish resources (Béné *et al.* 2009). Achieving sustained progress requires engaging the men and women of fishing communities in a

dialogue about the future they envision, the steps needed to get there, and the lessons that are learned along the way. It requires engaging a much broader array of actors across government, civil society and the private sector to build understanding of the reforms needed and the commitment to undertake them.

Development activities in fishing communities that help to address social exclusion, moreover, can support the operation of community-based fishing rights. Recent community management institutions in some African fisheries have been commendably designed to include the poor and those previously excluded from resource management institutions – including women boat owners and male crew labourers (Nunan 2006). But without wider investment in social development to address the factors that produced this exclusion, there is a risk that externally enforced participation by these groups can be undermined, and the benefits of community management are redistributed to favour the more powerful (e.g. Béné *et al.* 2009).

Small-scale fisherfolk are often excluded from processes of development planning, either because they are mobile (including unregistered international migrants), living in marginal and remote areas, or simply because their role and contribution to the economy is poorly known and underappreciated. For these reasons, they may not be able to gain the support of external agents (e.g. governments, NGOs and donor agencies) to help them reduce their vulnerability and improve their rights and access to basic social services. In turn, the lack of these services puts them at risk of ill health, of missing out on financial service and educational provision, of theft and conflict and of exclusion from participation in social and political processes (Njock *et al.* 2009).

The small-scale fisheries sector is also vulnerable to competing uses for aquatic resources, including floodplain modification and damming of rivers for irrigation, flood control, hydropower and water storage, displacement by aquaculture, tourism and other coastal development, and pollution. Local systems allocating fishing rights can confront and prevent some of these threats, but not all, notably pollution and upstream modifications in river basins. Where fishing interests are historically overridden or unrepresented in wider planning processes, then people have no incentive to invest in managing their local fishery resources to optimize future yields, even if they have exclusive rights of access to them.

The overall outcome of these processes is that, because of their continuing vulnerability and social exclusion, many fishing people currently lack both the incentive and capacity to claim and defend systems of access rights that aim to conserve stocks for their exclusive use. An appropriate development response to this dilemma is therefore to address small-scale fishing people's vulnerability and social exclusion. This should be part of any programme aiming to define and strengthen rights of access as a way to improve the contribution of fisheries to poverty reduction, and to rebuild fisheries so they contribute more to wealth creation and economic growth. In the following section, we propose an agenda for action to implement a broader rights-based approach and give some examples on how this approach could be implemented as a framework for making policy choices. In the ensuing discussion, we then argue that governing small scale fisheries in developing countries can be approached by applying the existing legal framework of the Universal Declaration of Human Rights and its application in national laws and policies. No new institutions and laws are necessary – merely the application of existing ones that, because they transcend the fishery sector – do not appear to have been much considered in previous fishery sector analyses.

Rights-based approaches and fisheries governance: an agenda for action

To interest and enable fisherfolk to participate in resource management, fisheries development programmes will need to address the factors that most immediately and directly threaten the sustainability of their livelihoods. Policies and actions must address the root causes of vulnerability and insecurity. This requires understanding the means by which households adapt to reduce their risks, the incentives that drive the decisions of resource users and the sources of their vulnerability to stresses and shocks.

This broader human rights agenda gives attention to legally mandated rights to decent working conditions, gender equality, children's rights to education and freedom from exploitation, and the rights of migrants and other potentially vulnerable groups (OHCHR 2004). In attempting to provide an enabling environment for responsible fisheries, the fisheries sector will benefit from making stronger use of the international laws on human rights. The

needs of fishing communities, likewise, need to be more consistently integrated in national and local poverty reduction policy actions to ensure these communities have equitable access to social service provision, including health, education and judicial services.

A strategy to bring together responsible fisheries with social development to strengthen capacity and incentives of fisherfolk to invest in defending their fishing rights should consider the following principles:

- *Address over-exploitation that threatens resource sustainability and the flow of benefits from fisheries to the wider economy as a priority objective of a shift towards rights-based fisheries management.* In addition to defining rights to fish, the rights of present and future generations to benefit from the resources should be included. Building the value of the resources should be an explicit objective of fisheries management in the small-scale subsector, which in most places requires a reduction in fishing capacity and capitalization.
- *Support empowerment of fishing communities, both through their social inclusion and building their capabilities.* Transition to (human + property) rights-based fishing requires relationships between fishing rights holders and duty-bearers (such as governments) to be transparent and based on mutual trust and accountability. Social inclusion of fishing communities, together with improved fishery governance, would also help address many of the conditions that currently link the fishing sector with illegal activities – both related to fishing and to other maritime and transnational crime (Allison and Kelling 2009). Community institutions must be strengthened, and approaches must be cross-cutting and integrative.
- *Integrate broader human rights of fishers to an adequate livelihood as part of an expanded rights-based approach to fisheries management.* This means including poverty reduction criteria as a key component of decisions over equitable allocation of rights, including decisions over inclusion and exclusion, and the protection of small-scale fishworkers' access to resources and markets. It means supporting opportunities for poor small-scale fishers to derive increased benefits without increasing their catch, through measures to improve value-addition in the supply chain, infrastructure, market cooperatives and access to credit. It also means addressing

deficiencies in fishing people's rights of equitable access to health care, education and community services such as safe drinking water and sanitation.

- *Support improvements in the broader governance context including access to justice and mechanisms for conflict resolution by advocating for the fair treatment of fishers under the rule of law and their equitable participation in intersectoral decision-making.* Conflicts between small-scale and commercial/industrial sectors, other fishing groups and other users of coastal and riverine environments (tourism, transportation, industry, etc.) are widespread, and typically put small-scale fishers, particularly the poorest, at a serious disadvantage.
- *Integrate responsible fisheries policies with wider poverty reduction policies in countries where fisheries are economically important.* This is a necessary condition to achieve intersectoral policy coherence and maximize the contribution of fisheries to meeting poverty targets such as the Millennium Development Goals. It is also important for ensuring that fisheries agencies receive an appropriate allocation of central and local government

budgets and that small-scale fishing communities are included equitably in national economic development and social development planning.

Support for many of the fishery-related aspects of the above suggestions are already found in the FAO Code of Conduct for Responsible Fisheries (Charles 2011) but such a strategy also recognizes that many of the factors that influence the ability and willingness of small-scale fishers to engage in efforts to improve fisheries management lie outside the domain of fisheries sector policy and management institutions. As represented in Fig. 1, nurturing the foundations of social–ecological resilience in developing-country small-scale fisheries requires attention to economic incentives, social and human welfare, political inclusion, and resource governance. Some of the levers to address these lie within the fisheries sector, others relate to the broader context of governance and rights beyond fisheries (see Fig. 1). Similarly, the effectiveness of management institutions and resource tenure arrangements depends on the broader context of governance and intersectoral decision-making with which these institutions must contend.

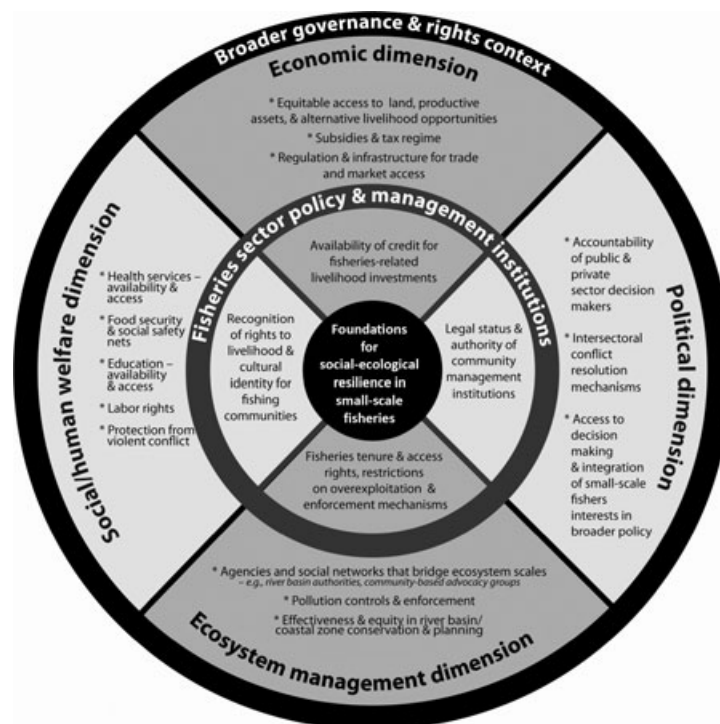


Figure 1 The governance and rights context for social–ecological resilience in small-scale fisheries. Examples given are meant to be an illustrative not comprehensive list of factors.

When is a human rights approach appropriate?

Pursuing a human-rights-based agenda requires a flexible approach based on a diagnostic process in which fisherfolk themselves are principal agents of change (Andrew *et al.* 2007). The key is to locate and target the binding constraints on sustainable or resilient small-scale fisheries and address those constraints first. In some cases, it will still mean starting with aquatic property rights, yet it is wrong to assume this is always going to be the most relevant and effective place to start.

In many instances, the results of this diagnosis will suggest a sequenced approach to addressing insecurity in fisheries where failures of basic rights (or entitlements) are clearly evident. In these cases, it will be most effective to first address the factors that fisherfolk perceive as the greatest threat to their livelihood security or indeed their lives. Only then (or simultaneously) can resource governance failures, including weak aquatic property rights, be successfully addressed. When people are relatively secure and have secure rights of access to resources, then addressing remaining market failures that limit profitability of fisheries becomes a priority. Investing out of sequence, for example strengthening access to global markets without first (or also) addressing resource governance failures and failures of basic

entitlements, will jeopardize the existing economic support functions of fisheries and further marginalize the poor without bringing tangible benefits for wider poverty reduction (Béné *et al.* 2010b).

Table 1 provides a schematic overview of how a diagnosis of small-scale fisheries yields different conclusions regarding priority areas for intervention. The tabular overview of three case studies is expanded later.

Lake Victoria

Fishers around Lake Victoria face multiple deficiencies in basic rights. Development organizations, researchers and journalists working in the area have documented poor access to basic social services and education (Bishop-Sambrook and Tanzarn 2004; Kateka 2010), and discrimination against women (Geheb *et al.* 2008). These are issues that need to be addressed as a priority before fishers around the lake can reasonably be expected to engage with government as partners in aquatic resource protection and management efforts.

Philippines

Galit (2001), of the Environmental Legal Assistance Center (ELAC), describes the process of creating a system for community-based coastal resources

Table 1 Sequencing investments in small-scale fisheries.

	Lake Victoria, Africa	Honda Bay, Philippines	Benthic shellfisheries, Chile
Basic socioeconomic rights	Focus area Lack of access to basic social services Lack of access to education Discrimination against women	Improved Whistle-blowing and empowerment work by human rights NGO has made communities more aware of their rights. Better equality before the law	Secure Justice system is functioning, and citizens' rights are largely respected Fishery communities around the Chilean <i>caletas</i> ('coves') have for a long time had specific rights under Chilean law
Resource governance	Ineffective Participation of fishers in improved management blocked by concerns over more basic rights	Focus area Regional comanagement system has been implemented, and marine sanctuaries have been established. A management body or council for the bay is yet to be formed	Well-functioning Legal basis for community-based management secure and has high legitimacy despite some concerns about enforcement by government institutions
Access to global markets	Not a primary constraint Improvements in market access would likely deepen inequalities	Not a primary constraint Access to domestic urban markets	Focus area Incomes have not been perceived to increase for small producers despite improved resource management

See text for references to case studies.

management (CBCRM) around Honda Bay in the Philippines as intrinsically linked to the struggle for basic rights. In addition to poverty, rampant illegal fishing, mercury contamination and unregulated tourism development, the villagers were suffering from human rights violations such as detention without trial. The ELAC project, starting in 1996, had the objectives of assisting coastal communities to acquire property rights over their coastal resources; to transform people's unsustainable patterns of resource use; and to provide legal assistance in the defence of their rights. As the people became empowered and to a greater extent aware of and ready to claim their rights, the process of setting up a management system was facilitated:

“[P]robably the biggest and most important catch by far is the change in the attitude of people of Honda Bay – their attitude towards the resources, their attitude towards their rights for a balanced ecology, their attitude in fighting for their rights. And, of course, their attitude towards the future.” (Galit 2001, p. 168)

Issues remain to be solved in relation to the coastal resources management around Honda Bay (Pomeroy *et al.* 2009), but the improvement in basic human rights will create a more stable foundation for this work.

Chile

When Chile started to implement a system of community use rights in 1991, coastal communities around the *caletas* ('coves') were already well established and recognized under Chilean law (Castilla and Gelcich 2006). The implementation of the new Fisheries and Aquaculture Law also coincided with Chile's transition to a democratic state, and its human rights record is now very good with some exceptions (Human Rights Watch 2010). The regional common property regime has improved governance of the 'loco' (*Concholepas concholepas*, Muricidae) fishery and has been well received by small-scale fishers. The main challenge, according to Castilla and Gelcich (*op cit.*), is now to translate the management success into financial gains for the fishery communities. Towards this end, some marketing work has been carried out by the fisher unions in charge of implementing the area-based management, to achieve better prices.

The three examples above illustrate the argument for sequencing of development actions, with human rights as being fundamental: on Lake Victoria,

fisheries governance will require investment in basic social and economic rights if it is to maximize development benefits for the region; the investment in strengthening political and judicial rights was a prerequisite to developing participatory fisheries governance in Honda Bay, Philippines, and in Chile, the best investment was in strengthening marketing systems, because basic human rights and aquatic property rights had both already been secured.

Table 1 summarizes these examples to illustrate the interconnectedness between assurance of basic rights and improving resource governance. This guidance regarding sequencing of investments should not be misconstrued as a template nor as a substitute for a detailed, locally grounded and stakeholder-based diagnosis. Neither should it be seen to negate the intimate two-way interactions between basic human rights and governance, for example, or food security and resource tenure. Rather it is intended to serve as a reminder that the conditions of individual small-scale fisheries vary considerably. Solutions that might be suitable in advanced economies where fundamental rights are relatively secure can either fail or deepen poverty and insecurity if applied indiscriminately in countries where these foundations are missing (Ratner and Baran 2008).

Discussion

For many fishery management professionals, the expanded human-rights-based approach we present in this study may seem at once laudable and impractical. If merely managing fish stocks at sustainable levels of exploitation and improving the economic efficiency of the sector have proven elusive goals in so many places, how can expanding the scope of concern to a wide range of economic, nutritional, livelihood and political rights possibly make matters better?

First, and most fundamentally, our counterargument is that securing human rights is integral to improving fisheries governance and management outcomes in many of the world's fisheries. Strengthened rights are essential to reduce vulnerability and increase adaptive capacity, which in turn underpin social-ecological resilience. In developing-country small-scale fisheries in particular, conventional fisheries management has failed in part because it disregards the complexity of these systems, in both social and ecological dimensions (Andrew *et al.* 2007). The human rights framework provides a

means of acknowledging and addressing the social dimensions of these complex systems. Although other frameworks do this (e.g. the Ecosystem Approach to Fisheries; De Young *et al.* 2008), linking human rights to fisheries governance also provides a vehicle for increasing the accountability of government organizations to their citizens, and consequently, the likelihood that policy measures will be implemented in practice. In addition to the Universal Declaration of Human Rights and the many legal conventions derived from it, the foundation for a broader rights-based approach to fisheries development is well grounded in international norms and law including the 1995 FAO Code of Conduct for Responsible Fisheries, the FAO voluntary guidelines on the Right to Food and International Labour Organization (ILO) conventions on workers' rights (FAO 2007).

Additionally, when compared with the more conventional approach to fisheries management focused on fishing rights and economic efficiency, a human-rights-based approach allows fisheries departments and fishing communities to develop or broker novel links to strengthen fishery governance and address poverty reduction. These may include partnerships with emerging grassroots democratic processes, and new alliances of power between, for example, environmental NGOs and local communities, or between Western supermarket chains and organizations promoting fair fishing agreements. In many cases, it is the NGO and civil society sector – development NGOs, advocacy NGOs and grassroots movements – that are taking the lead in advocating and strengthening human rights for fishers and other households engaged in the sector.

The attention paid so far to human rights issues in fisheries has championed the rights of fisherfolk in isolation from their role in contributing to improvements in fisheries management and governance. Linking the human rights and resource governance agendas offers powerful scope for achieving progress on both. While this approach is still relatively new in the context of fisheries management and governance, early evidence is demonstrating that it can indeed achieve considerable impact. There is a need to further explore such cases of the practical use of human rights instruments for fisheries governance.

Conclusion

Programmes to introduce (property) rights-based fishing to the small-scale sector may fail at either

poverty reduction, resource conservation, or both, when undertaken in isolation from a consideration of the broader social and cultural conditions in fishing communities (Townsend 1998). Treating comanagement and other fishery governance and property rights reforms as merely technical and organizational issues, rather than the political and institutional ones that they undoubtedly are, risks the future of fisheries.

We also expect too much of fishing rights in a community-development context. We expect them to solve all societies' problems by 'empowering' people (Béné and Neiland 2006). Securing the right to fish can be very important to people, but it does not inure a fishing family to the effects of lack of access to health and social services, arbitrary taxation, theft of fishing gear, forced eviction from their house or sex discrimination in the fish-processing workplace.

The human rights approach that we are advocating does not mean rejecting one type of management or fishing rights system in favour of another. What it does is to address the fundamental issues that may hinder a successful introduction of any type of rights system in many developing countries. Assistance from other sectors in solving some of fishing communities' most pressing non-fishery problems would make it easier for them to solve their fishery-related ones. This would then help small-scale fishers to fish responsibly and continue to contribute to reducing poverty – both their own and that of those outside the sector to whom they provide food, revenue and economic opportunity (Thorpe *et al.* 2007; Béné *et al.* 2010a).

In sum, adoption of a broad human-rights-based approach makes good use of existing legal and policy frameworks; subsumes the narrower (property) rights-based approach to fisheries governance; engages a wide range of development actors; and is compatible with the broad architecture of development assistance, including the Millennium Development Goals (Heck *et al.* 2007; Seymour and Pincus 2008).

Acknowledgements

This paper draws upon an FAO Secretariat paper submitted to the 27th Session of the FAO Committee on Fisheries (COFI) in March 2007 (FAO 2007) entitled 'Social issues in small scale fisheries'. Edward Allison assisted in the drafting of this submission with comments and suggestions received from Rolf Willmann and other FAO staff. The

discussion by COFI delegations of this submission is reflected in FAO (2007). The ideas were subsequently presented by Blake Ratner, John Kurien, Rolf Willmann and Edward Allison and debated at the International Collective in Support of Fishworkers (ICSF) symposium on Asserting Rights, Defining Responsibilities (Siem Reap, Cambodia, June 2007) and at a training event organized by WorldFish for World Bank staff (Nha Trang, Vietnam, January 2008). Finally, as a follow-up from the 2007 session of COFI, FAO and the Government of Thailand organized the Global Conference on Small-Scale Fisheries – Securing Sustainable Small-Scale Fisheries: Bringing together responsible fisheries and social development. Bangkok, Thailand, 13–17 October, 2008, at which Edward Allison and other speakers elaborated on the arguments. We thank participants in all these events for their critical feedback, and particularly ICSF staff Chandrika Sharma, Sebastian Mathew and Nalini Nayak. We are also grateful to two anonymous reviewers for numerous constructive suggestions.

References

- Allison, E.H. and Kelling, I. (2009) Fishy crimes: the societal costs of poorly governed marine fisheries [Online]. Paper presented at the Third Annual Convention of the Consortium of Non-Traditional Security Studies in Asia, Singapore 3–4 November 2009. Available at: <http://www.rsis-ntsasia.org/activities/conventions/2009-singapore/Edward%20Allison.pdf> [Accessed 6 July 2010].
- Allison, E.H., Béné, C. and Andrew, N.L. (2011) Poverty reduction as a means to enhance resilience in small-scale fisheries. In: *Managing Small Scale Fisheries: Frameworks and Approaches* (eds R. Pomeroy and N.L. Andrew). CABI, London, pp. 216–238.
- Andrew, N.L. and Evans, L. (2009) Approaches and frameworks for management and research in small-scale fisheries in the developing world. *The WorldFish Center Working Paper* No. 1914, 22 pp.
- Andrew, N.L., Béné, C., Hall, S.J., Allison, E.H., Heck, S. and Ratner, B.D. (2007) Diagnosis and management of small-scale fisheries in developing countries. *Fish and Fisheries* **8**, 227–240.
- Barratt, C. (2009) *Netting the Benefits Now or Later? Exploring the Relationship Between Risk and Sustainability in Lake Victoria Fisheries, Uganda*. PhD Thesis, University of East Anglia, 237 pp.
- Beddington, J.R., Agnew, D.J. and Clark, C.W. (2007) Current problems in the management of marine fisheries. *Science* **316**, 1713–1716.
- Béné, C. (2003) When fishery rhymes with poverty. *World Development* **31**, 949–975.
- Béné, C. and Neiland, A.E. (2006) *From Participation to Governance*. WorldFish Center Studies and Reviews, no.29. WorldFish Center, Penang.
- Béné, C., Macfayden, G. and Allison, E.H. (2007) *Increasing the Contribution of Small-Scale Fisheries to Poverty Alleviation and Food Security* (FAO Fisheries Technical Paper, no. 481). FAO, Rome.
- Béné, C. and Friend, R.M. (2009) Water, poverty and inland fisheries: lessons from Africa and Asia. *Water International* **34**, 47–61.
- Béné, C., Belal, E., Baba, M.O. *et al.* (2009) Power struggle, dispute and alliance over local resources: analyzing ‘democratic’ decentralization of natural resources through the lenses of Africa inland fisheries. *World Development* **37**, 1935–1950.
- Béné, C., Hersoug, B. and Allison, E.H. (2010a) Not by rent alone: analysing the pro-poor functions of small-scale fisheries in developing countries. *Development Policy Review* **28**, 325–358.
- Béné, C., Lawton, R. and Allison, E.H. (2010b) ‘Trade matters in the fight against poverty’: narratives, perceptions, and (lack of) evidence in the case of fish trade in Africa. *World Development* **38**, 933–954.
- Berkes, F., Mahon, R., McConney, P., Pollnac, R. and Pomeroy, R. (2001) *Managing Small-Scale Fisheries: Alternative Directions and Methods*. International Development Research Center, Ottawa.
- Bishop-Sambrook, C. and Tanzarn, N. (2004) *The Susceptibility and Vulnerability of Small-Scale Fishing Communities to HIV/AIDS in Uganda* [Online]. Sector project undertaken by FAO HIV/AIDS Programme. Available at: http://www.fao.org/sd/dim_pe3/pe3_040101_en.htm [Accessed on 17 June 2010]. FAO, Rome.
- Browning, M. and Lusardi, A. (1996) Household saving: micro theories and micro facts. *Journal of Economic Literature* **34**, 1797–1855.
- Bundy, A., Chuenpagdee, R., Jentoft, S. and Mahon, R. (2008) If science is not the answer, what is? An alternative governance model for the world’s fisheries. *Frontiers in Ecology and the Environment* **6**, 152–155.
- Capistrano, R.C.G. (2010) Reclaiming the ancestral waters of indigenous peoples in the Philippines: the Tagbanua experience with fishing rights and indigenous rights. *Marine Policy* **34**, 453–460.
- Castilla, J.C. and Gelcich, S. (2006) Chile: experience with management and exploitation areas for coastal fisheries as building blocks for large-scale marine management. In: *Scaling up Marine Management: The Role of Marine Protected Areas*. World Bank Report No. 36635 – GLB. The World Bank, Washington, DC, pp. 45–57.
- Charles, A.T. (2002) Use rights and responsible fisheries: limiting access and harvesting through rights-based management. In: *A Fishery Manager’s Guidebook. Management Measures and their Application* (ed. K. Cochrane).

- FAO Fisheries Tech. Paper #424. Food and Agriculture Organization, Rome, pp. 131–158.
- Charles, A.T. (2011) Human rights and fishery rights in small-scale fisheries management. In: *Managing Small-Scale Fisheries: Frameworks and approaches* (eds R.S. Pomeroy and N.L. Andrew). CABI Publishing, London, pp. 59–74.
- Christy, F.T. (1996) The death rattle of open access and the advent of property rights regimes in fisheries. *Marine Resource Economics* **11**, 287–304.
- Chu, C. (2009) Thirty years later: the global growth of ITQs and their influence on stock status in marine fisheries. *Fish and Fisheries* **10**, 217–230.
- Cornwall, A. and Nyamu-Musembi, C. (2004) Putting the 'rights-based approach' to development into perspective. *Third World Quarterly* **25**, 1415–1437.
- Cunningham, S., Neiland, A.E., Arbuckle, M. and Bostock, T. (2009) Wealth-based fisheries management: using fisheries wealth to orchestrate sound fisheries policy in practice. *Marine Resource Economics* **24**, 271–287.
- Davis, A. and Jentoft, S. (2001) The challenge and the promise of indigenous peoples' fishing rights – from dependency to agency. *Marine Policy* **25**, 223–237.
- De Young, C., Charles, A. and Hjort, A. (2008) *Human Dimensions of the Ecosystem Approach to Fisheries: An Overview of Context, Concepts, Tools and Methods* (FAO Fisheries Technical Paper, no. 489). FAO, Rome.
- Department of Agriculture, Forestry and Fisheries (2010) Draft policy for the small-scale fisheries sector in South Africa. Government Gazette (33530), September 3, 2010, 54 pp.
- Edwards, S.F. (2003) Property rights to multi-attribute fishery resources. *Ecological Economics* **44**, 309–323.
- Environmental Justice Foundation (2010) *All at Sea – The Abuse of Human Rights Aboard Illegal Fishing Vessels*. EJF, London.
- FAO (2001) *International Plan of Action to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing*. FAO, Rome.
- FAO (2005) Reducing fisherfolk's vulnerability leads to responsible fisheries. Policies to support livelihoods and resources management. *New Directions in Fisheries: A Series of Policy Briefs on Development Issues (DFID/FAO)*, no. 01. FAO, Rome, 12 pp.
- FAO (2007) *Report of the Twenty-Seventh Session of the Committee on Fisheries* (FAO Fisheries and Aquaculture Report No. 830). FAO, Rome.
- FAO (2009) *Report of the Global Conference on Small-Scale Fisheries – Securing Sustainable Small-Scale Fisheries: Bringing Together Responsible Fisheries and Social Development*. Bangkok, Thailand, 13–17 October, 2008. FAO, Rome.
- Farrington, J. (2001) Sustainable livelihoods, rights and the new architecture of aid. *Natural Resource Perspectives* **69**, 4 pp.
- Galit, J. (2001) Catching power: a story of Honda Bay CBCRM. In: *Hope Takes Root – Community Based Coastal Resources Management Stories from Southeast Asia* (eds E.M. Ferrer, L. Polotan-de la Cruz and G.F. Newkirk). CBCRM Learning Center, Quezon City and Coastal Resources Research Network, Dalhousie University, Halifax, NS, Canada, pp. 145–168.
- Geheb, K. and Sarch, M.-T. (eds) (2002) *Africa's Inland Fisheries: The Management Challenge*. Fountain Publishers, Kampala.
- Geheb, K., Kalloch, S., Medard, M., Nyapendi, A.-T., Lwenya, C. and Kyangwa, M. (2008) Nile perch and the hungry of Lake Victoria: gender, status and food in an East African fishery. *Food Policy* **33**, 85–98.
- Gibbs, M.T. (2009) Individual transferable quotas and ecosystem-based fisheries management: it's all in the T. *Fish and Fisheries* **10**, 470–474.
- Gleick, P.H. (1998) The human right to water. *Water Policy* **1**, 487–503.
- Goulden, M. (2006) *Livelihood Diversification, Social Capital and Resilience to Climate Variability Amongst Natural Resource Dependent Societies in Uganda*. PhD Thesis, University of East Anglia, 421 pp.
- Grafton, R.Q., Arnason, R., Bjørndal, T. et al. (2006) Incentive-based approaches to sustainable Fisheries. *Canadian Journal of Fisheries and Aquatic Sciences* **63**, 699–710.
- Gruskin, S., Mills, E.J. and Tarantola, D. (2007) History, principles and practice of health and human rights. *Lancet* **370**, 449–455.
- Hannesson, R. (2004) *The Privatization of the Oceans*. MIT Press, Cambridge, MA, USA.
- Heck, S., Béné, C. and Reyes-Gaskin, R. (2007) Investing in African fisheries: building links to the Millennium Development Goals. *Fish and Fisheries* **8**, 211–226.
- Hilborn, R. (2007) Defining success in fisheries and conflicts in objectives. *Marine Policy* **31**, 153–158.
- Hilborn, R., Orensanz, J.M. and Parma, A.M. (2005) Institutions, incentives and the future of fisheries. *Philosophical Transactions of the Royal Society B* **360**, 47–57.
- Human Rights Watch (2010) *World Report 2010*. Human Rights Watch, New York.
- International Collective in Support of Fishworkers (2007) 'Siem Reap Statement' [Online]. From the Workshop on 'Asserting Rights, Defining Responsibilities: Perspectives from Small-scale Fishing Communities on Coastal and Fisheries Management in Asia'. Siem Reap, Cambodia, 3–5 May 2007. Available at: http://icsf.net/icsf2006/uploads/resources/statements/pdf/english/statements/1178871753673***SRStatement-final.doc [Accessed 15 June 2010].
- International Collective in Support of Fishworkers (2008a) 'Zanzibar Statement on Rights-Based Approach to Small-Scale, Artisanal and Indigenous Fisheries' [Online]. From the East and Southern Africa Small-scale Fisheries

- Workshop (ESA-2008), Zanzibar, 24–27 June 2008. Available: http://icsf.net/icsf2006/uploads/resources/statements/pdf/english/statements/1215163621239***Zanzibar_Statement_Final%5B1%5D.doc [Accessed 15 June 2010].
- International Collective in Support of Fishworkers (2008b) 'Workshop Statement' [Online]. From Workshop on Asserting Rights, Defining Responsibilities: Perspectives from Artisanal Fishing and Coastal Communities on Fisheries and Aquaculture Policies, Coastal Management, Access to Markets and Aquatic Biodiversity Conservation in Latin America. Punta de Tralca, Chile, 4–8 August 2008. Available: http://icsf.net/icsf2006/uploads/resources/statements/pdf/english/statements/1223046420191***Punta_de_Tralca_Workshop_Statement_Eng.doc [Accessed 15 June 2010].
- International Labour Organization (1999) *Safety and Health in the Fishing Industry*. Report for discussion at the Tripartite Meeting on Safety and Health in the Fishing Industry, Geneva, 13–17 December 1999. International Labour Organization, Geneva.
- Isaacs, M. (2006) Small-scale fisheries reforms: expectations, hopes and dreams for "a better life for all". *Marine Policy* **30**, 51–59.
- Jentoft, S., Onyango, P. and Islam, M.M. (2010) Freedom and poverty in the fishery commons. *International Journal of the Commons* **4**, 345–366.
- Kateka, A.G. (2010) *Co-management Challenges in the Lake Victoria Fisheries: A Context Approach (Acta Universitatis Stockholmiensis – Stockholm Studies in Human Geography, No. 19)* [Online]. PhD thesis, University of Stockholm, 269 pp. Available at: <http://su.diva-portal.org/smash/get/diva2:286582/FULLTEXT01> [Accessed 17 June 2010].
- Kooiman, J., Bavinck, M., Jentoft, S. and Pullin, R. (eds) (2005), *Fish for Life: Interactive Governance for Fisheries*. Amsterdam University Press, Amsterdam, 427 pp.
- Kurien, J. (2007) The blessing of the commons: small-scale fisheries, community property rights and coastal natural assets. In: *Reclaiming Nature: Environmental Justice and Ecological Restoration* (eds J.K. Boyce, S. Narain and E.A. Stanton). Anthem Press, London and New York, pp. 23–54.
- Lam, M.E. and Pauly, D. (2010) Who is right to fish? Evolving an social contract for ethical fisheries. *Ecology and Society* **15**, 16. [online] URL: <http://www.ecologyandsociety.org/vol15/iss3/art16/>.
- Legal Resources Centre (2007) *Annual Report 2006/7*. [Online] Legal Resources Centre. Available at: <http://www.lrc.org.za/annual-reports/319-2006-2007> [Accessed 2 June 2010].
- Macinko, S. and Bromley, D.W. (2004) Property and fisheries for the twenty-first century: seeking coherence from legal and economic doctrine. *Vermont Law Review* **28**, 623–661.
- Mill, J.S. (1909) *Principles of Political Economy with some of their Applications to Social Philosophy*. Seventh edition (ed. W.J. Ashley) (Original edition, 1848) Longmans, Green and Co., London.
- Mills, D., Béné, C., Ovie, S. et al. (2009) Vulnerability in African small-scale fishing communities. *Journal of International Development* [Online] Available at <http://www.interscience.wiley.com> [DOI: 10.1002/jid.1638].
- Neher, P., Arnason, R. and Mollet, N. eds. (1989) *Rights-Based Fishing*. Kluwer Academic Press, Boston.
- Njock, J.-C., Allison, E.H., Westlund, L. and Konan, A. (2009) Innovations in fisheries co-management, and the challenge of mobility. In: *Fisheries, Sustainability and Development* (eds P. Wramner, M. Cullberg and H. Ackefors). Royal Swedish Academy of Agriculture and Forestry, Stockholm, pp. 267–280.
- Nunan, F. (2006) Empowerment and institutions: managing fisheries in Uganda. *World Development* **34**, 1316–1332.
- OECD (2006a) *Using Market Mechanisms to Manage Fisheries: Smoothing the Path*. OECD, Paris.
- OECD (2006b) *Integrating Human Rights into Development: Donor Approaches, Experiences and Challenges*. OECD, Paris.
- Office of the High Commissioner for Human Rights (2004) *Human Rights and Poverty Reduction: A Conceptual Framework*. United Nations, New York and Geneva.
- Ommer, R. (2000) The ethical implications of property concepts in a fishery. In: *Just Fish: Ethics and Canadian Marine Fisheries* (eds H.G. Coward, R. Ommer and T.J. Pitcher). Institute of Social and Economic Research, Memorial University of Newfoundland (ICER), St John's, pp. 117–139.
- Onyango, P. and Jentoft, S. (2010) Assessing poverty in small scale fisheries in Lake Victoria, Kenya. *Fish and Fisheries* **11**, 250–263.
- Pitcher, T.J. and Lam, M.E. (2010) Fishful thinking: rhetoric, reality, and the sea before us. *Ecology and Society* **15**, 12. [online] URL: <http://www.ecologyandsociety.org/vol15/iss2/art12/>.
- Pogge, T. (2006) Recognized and violated by international law: the human rights of the global poor. *Leiden Journal of International Law* **18**, 717–745.
- Pomeroy, R.S. and Ahmed, M. (2006) *Fisheries and Coastal Resources Co-management in Asia: Selected Results from a Regional Research Project* (WorldFish Center Studies and Reviews, no. 30). WorldFish Center, Penang.
- Pomeroy, R.S. and Viswanathan, K. (2003) Fisheries co-management developments in Southeast Asia and Bangladesh. In: *The Fisheries Co-management Experience: Accomplishments, Challenges and Prospects* (eds D.G. Wilson, J. Raakjaer-Nielsen and P. Degnbol). Kluwer Academic Publishers, Dordrecht, pp. 99–118.
- Pomeroy, R.S., Katon, B.M. and Harkes, I. (2001) Conditions affecting the success of fisheries co-management: lessons from Asia. *Marine Policy* **25**, 197–208.

- Pomeroy, R.S., Ratner, B.D., Hall, S.J., Pimoljinda, J. and Vivekanandan, V. (2006) Coping with disaster: rehabilitating coastal livelihoods and communities. *Marine Policy* **30**, 786–793.
- Pomeroy, R.S., Garces, L., Pido, M. and Silvestre, G. (2009) Ecosystem-based fisheries management in small-scale tropical marine fisheries: emerging models of governance arrangements in the Philippines. *Marine Policy* **34**, 298–308.
- Ratner, B.D. (2006) Community management by decree? Lessons from Cambodia's fisheries reform. *Society and Natural Resources*, **19**, 79–86.
- Ratner, B.D. and Baran, E. (2008) From sound economics to sound management: practical solutions to small-scale fisheries governance in the developing world. *Maritime Studies* **6**, 29–33.
- Runolfsson, B. (1998) Fencing the oceans: a rights-based approach to privatizing fisheries. *Policy: The Quarterly Review of the Centre for Independent Studies Autumn 1998* [Online]. Available at: <http://www.cis.org.au/Policy/autumn98/aut9804.htm> [Accessed 15 June 2010].
- Sandmo, A. (1970) The effect of uncertainty on saving decisions. *The Review of Economic Studies* **37**, 353–360.
- Sen, A. (2000) *Social Exclusion: Concept, Application and Scrutiny*. *Social Development Papers* No 1, 54 pp. Asian Development Bank, Manila.
- Seymour, D. and Pincus, J. (2008) Human rights and economics: the conceptual basis for their complementarity. *Development Policy Review* **26**, 387–405.
- Sharma, C. (2009) Securing economic, social and cultural rights of fishworkers and fishing communities. In: *Report of the Global Conference on Small-Scale Fisheries* (FAO Fisheries and Aquaculture Report No. 911; Securing Sustainable Small-Scale Fisheries: Bringing together responsible fisheries and social development, Bangkok, 13–17 October, 2008). FAO, Rome, 177 pp.
- Sherman, D.J. (2006) Seizing the cultural and political moment and catching fish: political development of Māori in New Zealand, the Sealord Fisheries Settlement, and social movement theory. *The Social Science Journal* **43**, 513–527.
- Shotton, R. (ed.) (2000) *Use of Property Rights in Fisheries Management* (FAO Fisheries Technical Paper No. 404 – Proceedings of the FishRights99 Conference, Fremantle (Australia), 11–19 Nov 1999). FAO, Rome.
- Smith, I.R. (1979) *A Research Framework for Traditional Fisheries* (International Center for Living Aquatic Resources Management [ICLARM] Studies and Reviews, No. 2). ICLARM, Manila.
- Smith, C. and Dodson, M. (2010) Report on indigenous fishing rights in the seas with case studies from Australia and Norway. *Report Prepared for the Ninth Session of the Permanent Forum on Indigenous Issues, New York, 19–30 April 2010*. United Nations Economic and Social Council, document symbol E/C.19/2010/2.
- Sumaila, U.R. (2010) A cautionary note on individual transferable quotas. *Ecology and Society* [Online] **15**, 36. Available at: <http://www.ecologyandsociety.org/vol15/iss3/art36/>.
- Thorpe, A., Andrew, N.L. and Allison, E.H. (2007) Fisheries and poverty reduction. *CAB Review in Agriculture, Veterinary Science, Nutrition and Natural Resources* **2** No. 085 [Online]. Available at: <http://www.cababstractsplus.org/cabreviews>.
- Townsend, R.E. (1998) Beyond ITQs: property rights as a management tool. *Fisheries Research* **37**, 203–210.
- Townsend, R.E. and Charles, A.T. (1997) User rights in fishing. In: *Northwest Atlantic Groundfish: Perspectives on a Fishery Collapse* (eds J.G. Boreman, B.S. Nakashima, J.A. Wilson and R.L. Kendall). American Fisheries Society, Bethesda, Maryland, pp. 177–184.
- Townsley, P. (1998) *Social Issues in Fisheries*. *Fisheries Technical Paper* 375. FAO, Rome, 93 pp.
- Willmann, R. (2000) Group and community-based fishing rights. In: *Use of Property Rights in Fisheries Management*. Proceedings of the FishRights99 Conference, Fremantle (Australia), 11–19 November 1999. (ed. R. Shotton), FAO Fisheries Technical Paper No. 404 (1) FAO, Rome, pp. 51–57.
- World Bank (2004) *Saving Fish and Fishers: Towards Sustainable and Equitable Governance of the Global Fishing Sector* (Report No. 29090-GLB). The World Bank, Washington, D.C.